

FIG.1A

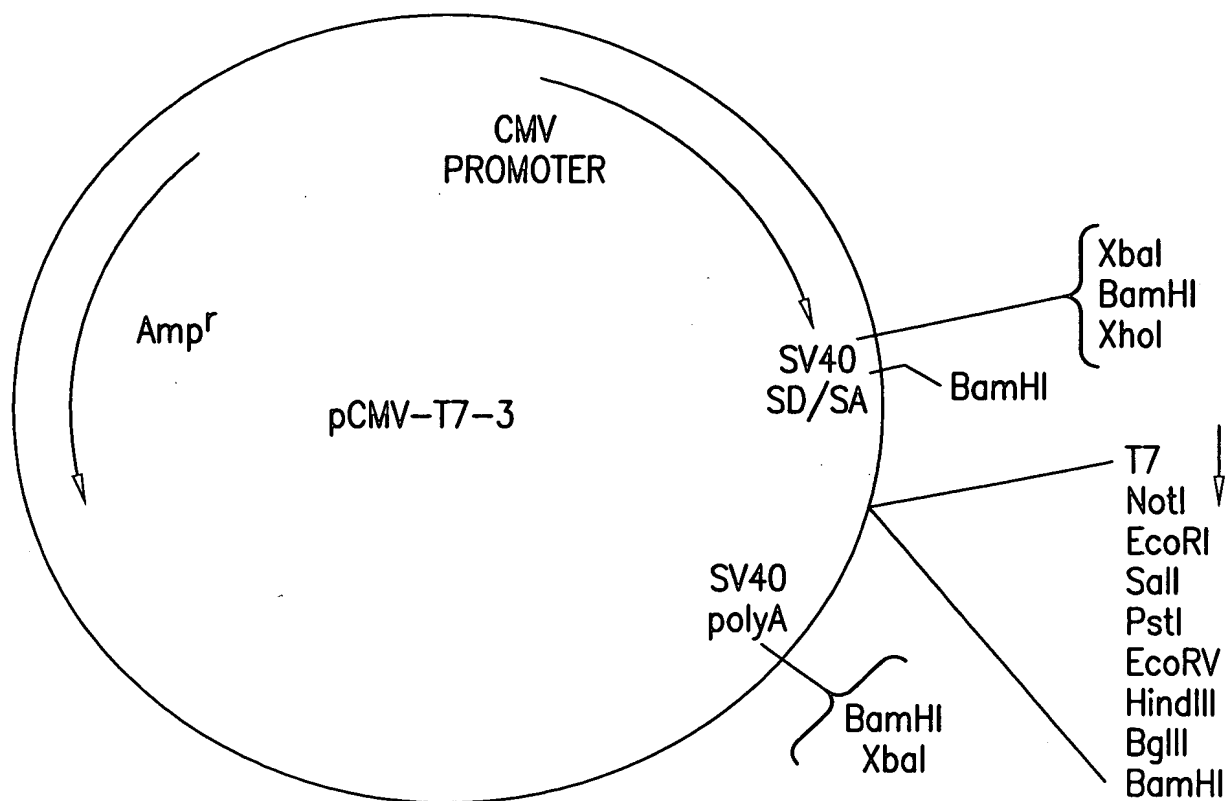


FIG.1B

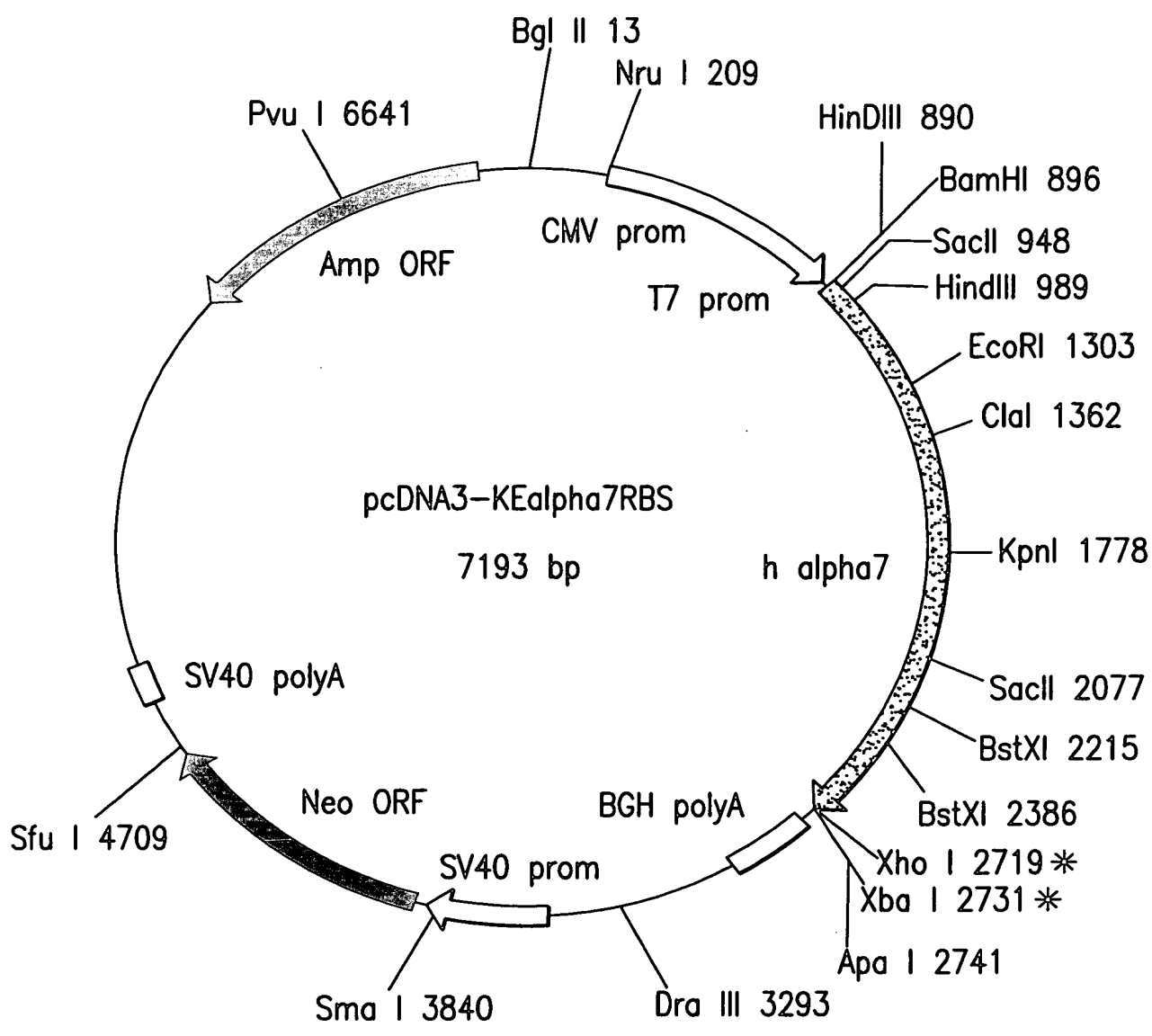


FIG.2

AGONIST-INDUCE INCREASES IN  $[Ca^{2+}]_i$  FOR A7 STABLE  
CELL LINE  
(EXPRESSING THE NICOTINIC ALPHA 7 RECEPTOR IN GH<sub>4</sub>C<sub>1</sub> CELLS)

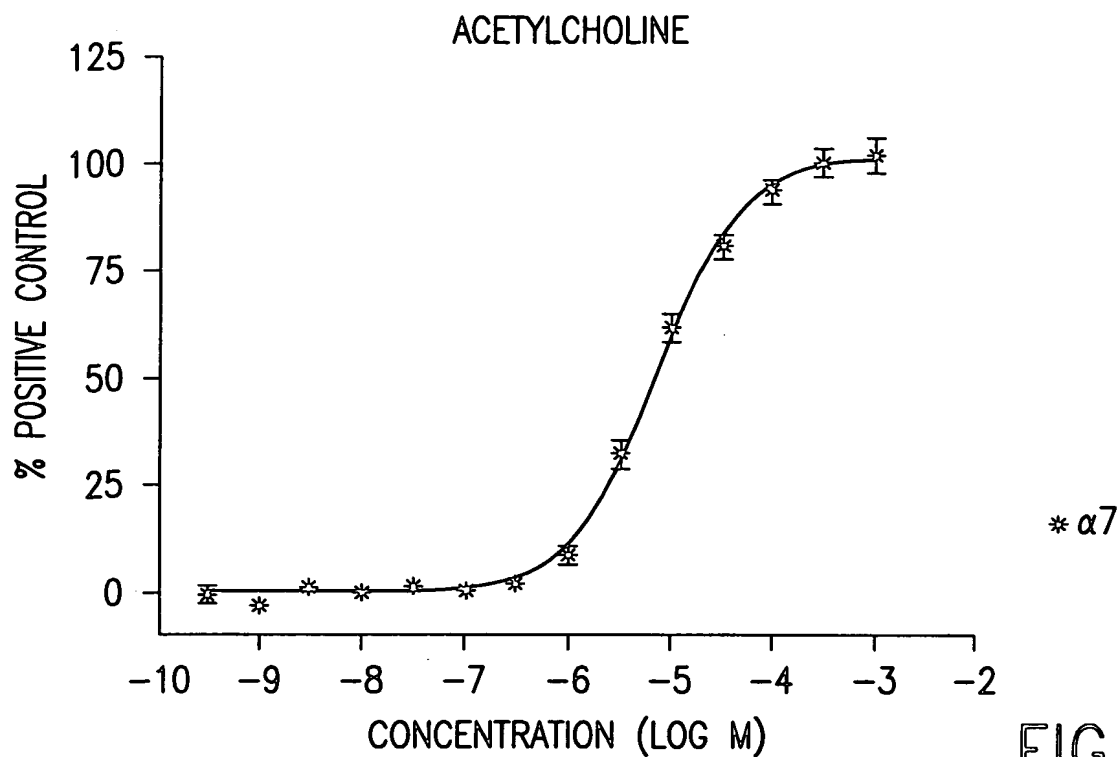


FIG.3A

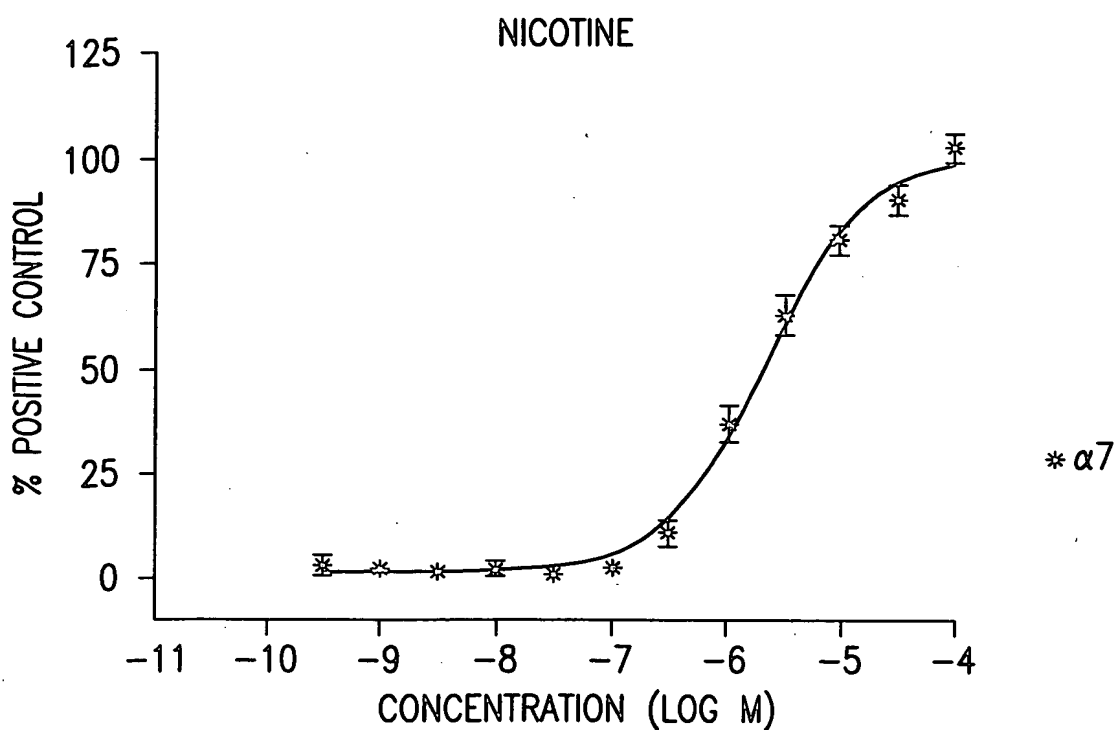


FIG.3B



G1-9-15-8 (A7) CELL

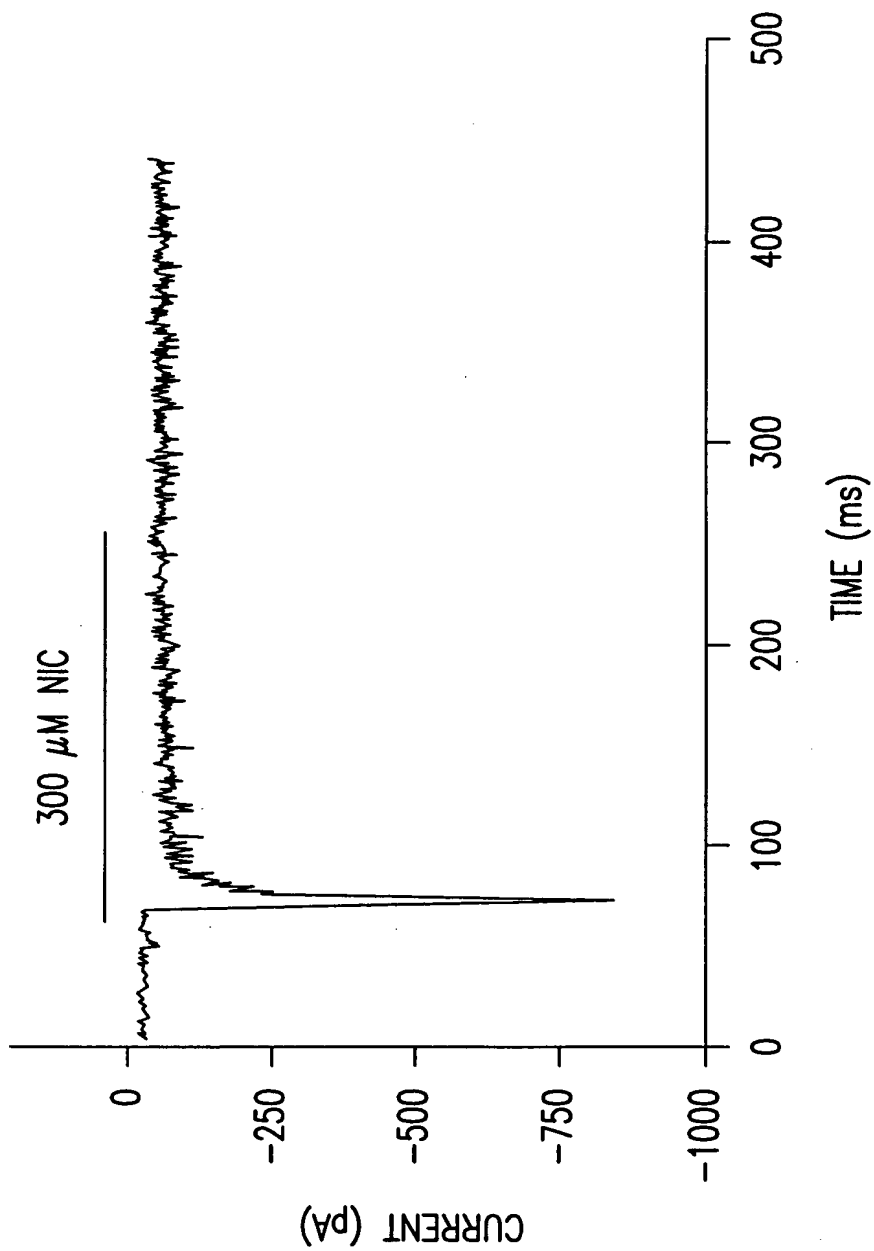
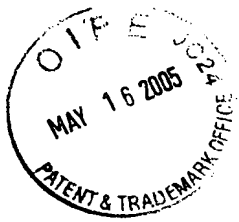
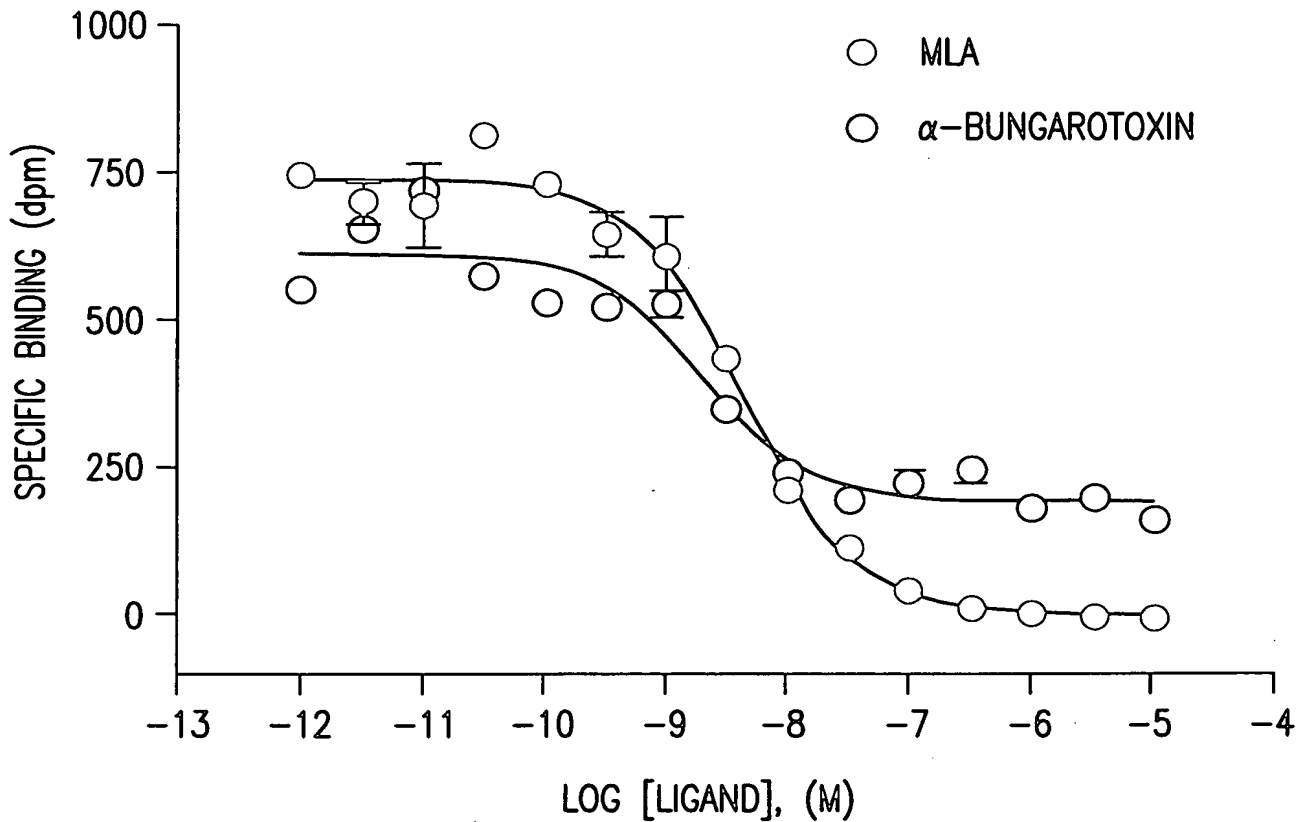


FIG.4



[<sup>3</sup>H]-METHYLLYCACONITINE BINDING TO MEMBRANES PREPARED FROM  $\alpha 7$  EXPRESSED IN GH4C1 WHOLE CELLS



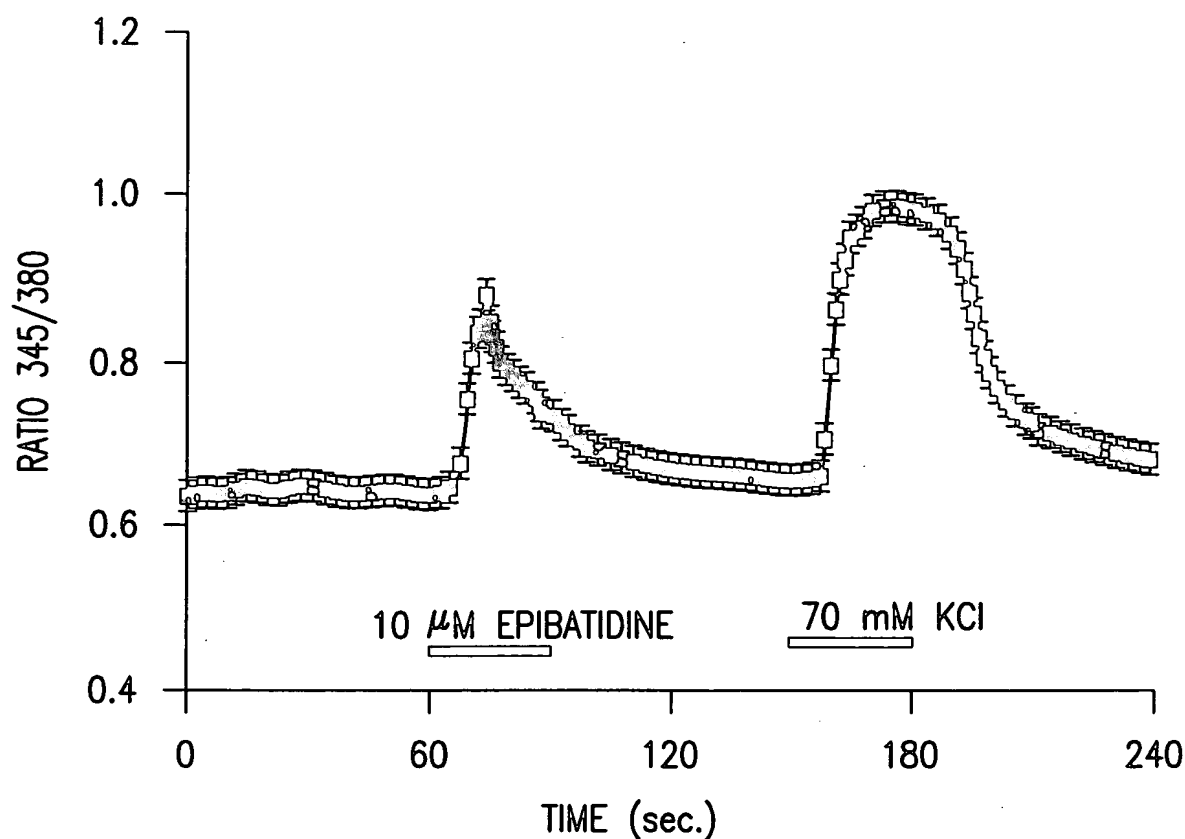
	MLA	$\alpha$ -BUNGAROTOXIN
BOTTOM	0.3228	191.7
TOP	737.1	612.3
LOGEC50	-8.353	-8.689
HILLSLOPE	-0.9527	-0.9856
EC50	4.4320e-009	2.0470e-009

FIG.5



SINGLE-CELL IMAGING DATA DEMONSTRATES  
THE HOMOGENEOUS RESPONSE OF STABLE CELL  
LINE A7 TO EPIBATIDINE

$\alpha_7$  SUBCLONE G1-9-15-8  
15 ROI  $\pm$  SEM



CELLS WERE SUPERFUSED WITH HBS PRIOR TO TREATMENT PERIODS  
AS INDICATED ON THE GRAPH. VALUES ARE MEANS  $\pm$  SEM FROM  
ONE EXPERIMENT. CELLS WERE CULTURED AT 37 °C.

FIG.6

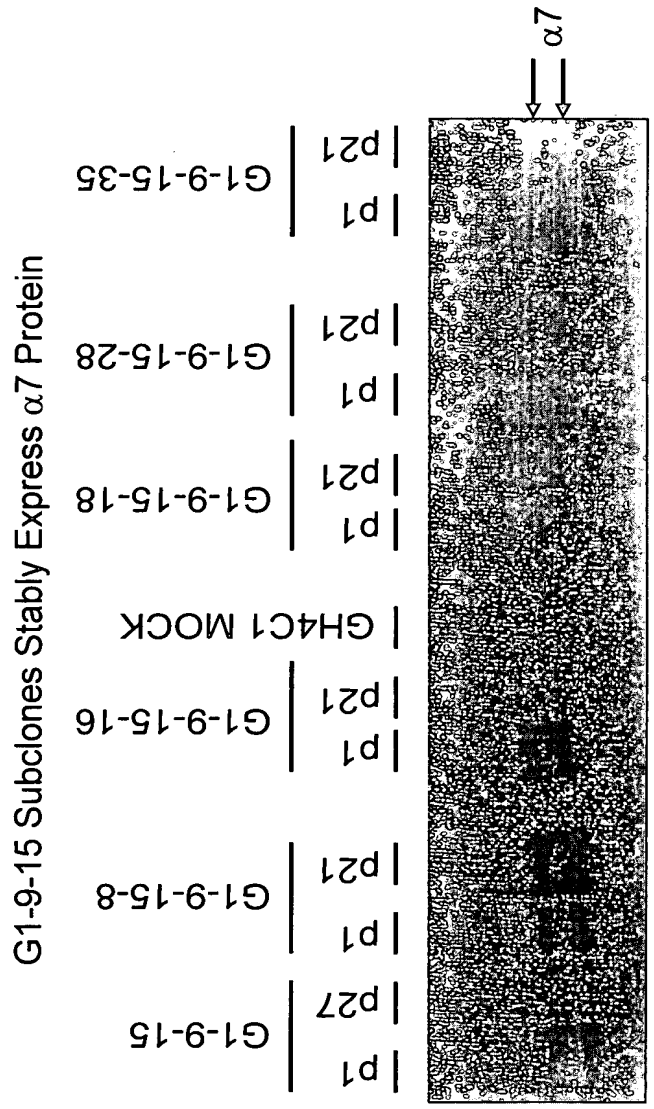


FIG.7

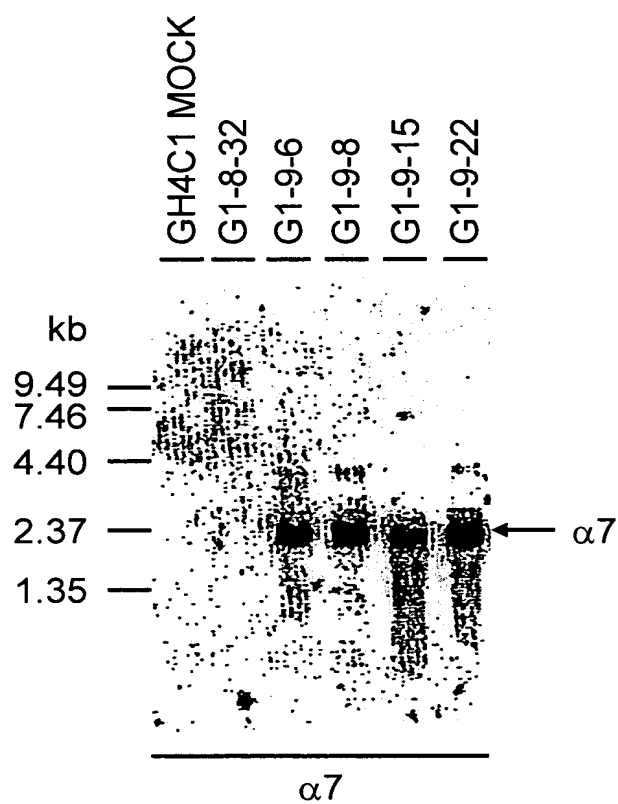


FIG.8



AGONIST PHARMACOLOGY OF A3B2A5 CELLS  
IS DISTINCT FROM A3B2 ( $\alpha 3\beta 2$ ) CELLS

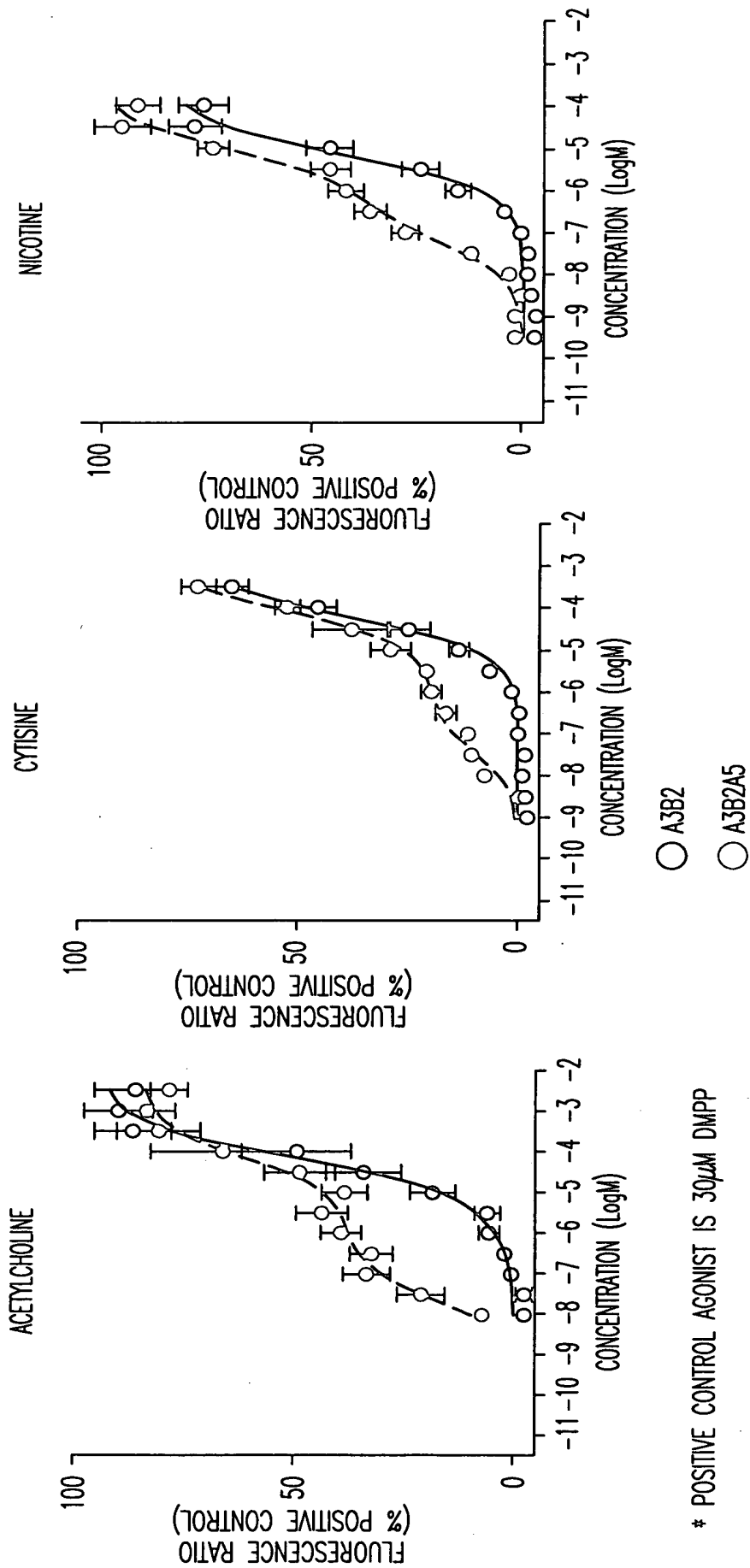


FIG. 9A

AGONIST PHARMACOLOGY OF A3B2A5 CELLS  
 IS DISTINCT FROM A3B2 ( $\alpha 3\beta 2$ ) CELLS

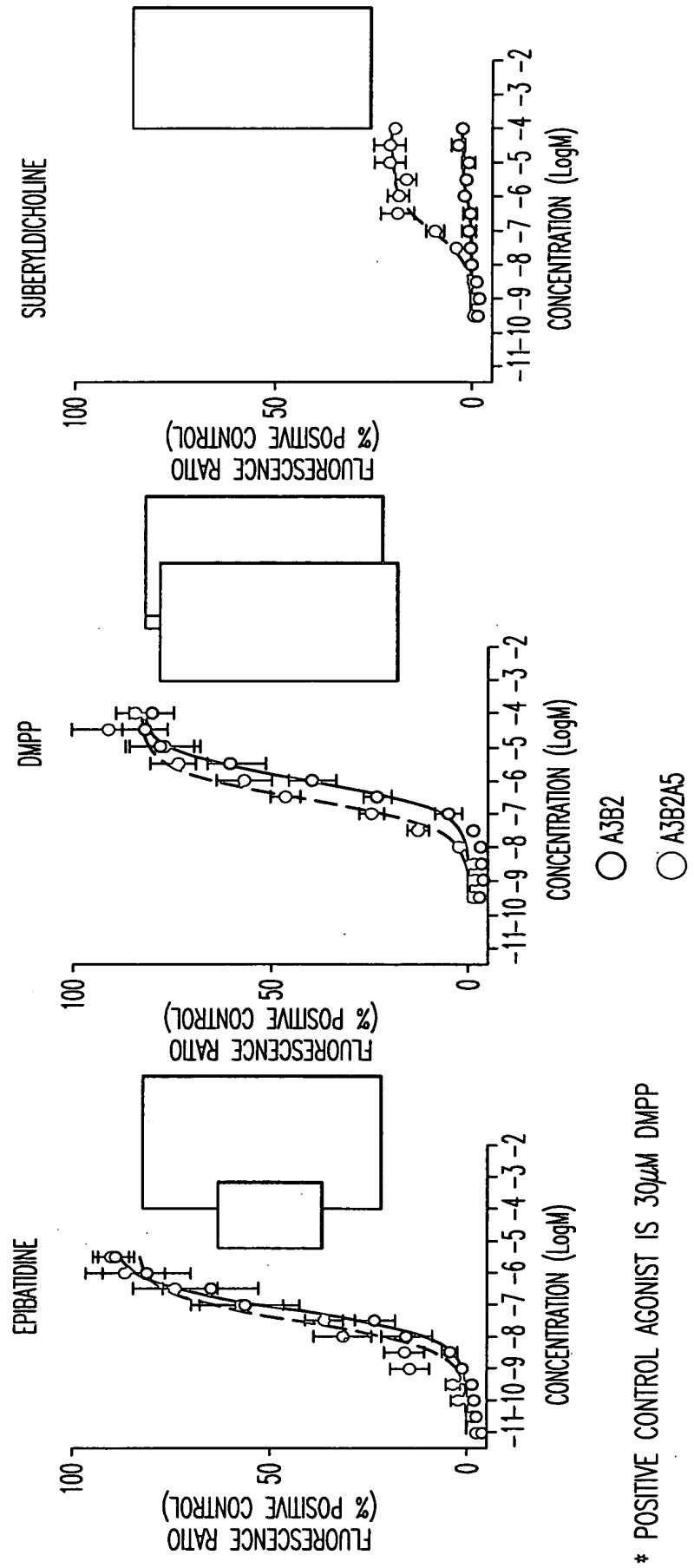
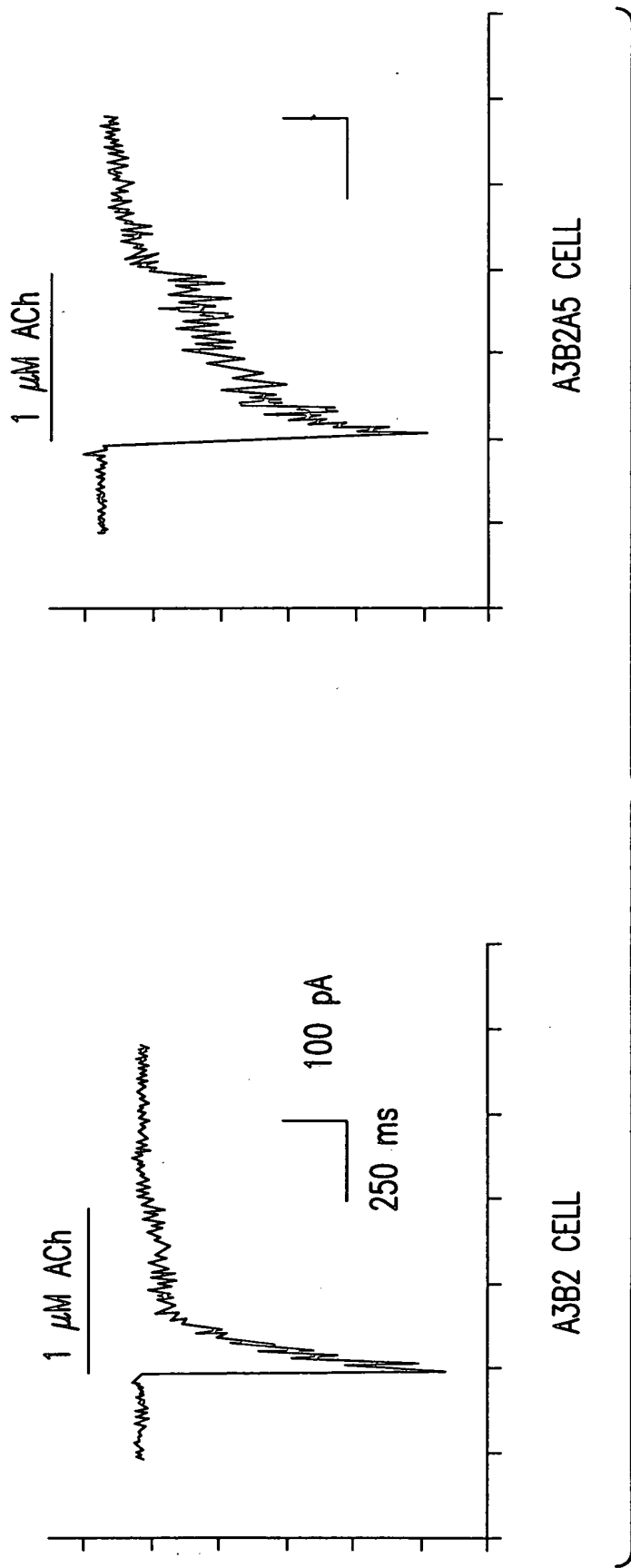
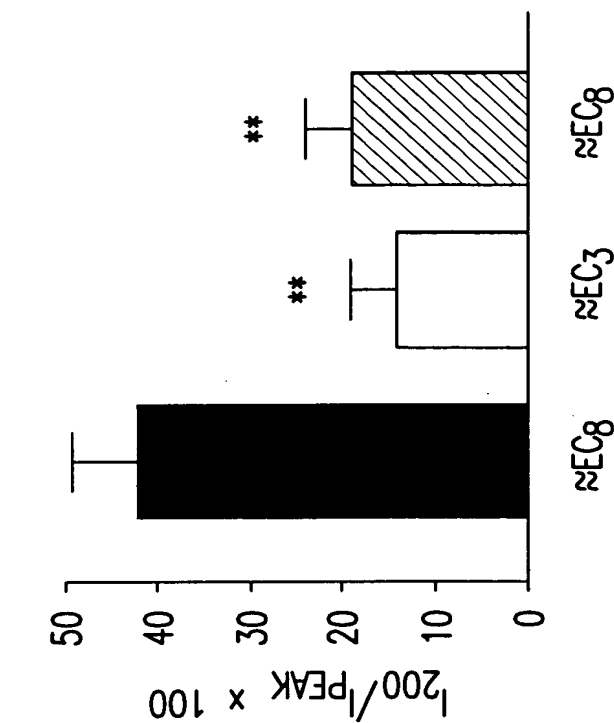


FIG. 9B

THE KINETICS OF DECAY OF CURRENTS INDUCED BY LOW DOSES OF  
ACETYLCHOLINE ARE SLOWER IN A3B2A5 THAN IN A3B2 CELLS



RESIDUAL CURRENT MEASURED  
200 ms AFTER CURRENT ONSET



TIME CONSTANT OF DECAY OF  
CURRENTS INDUCED BY ACh

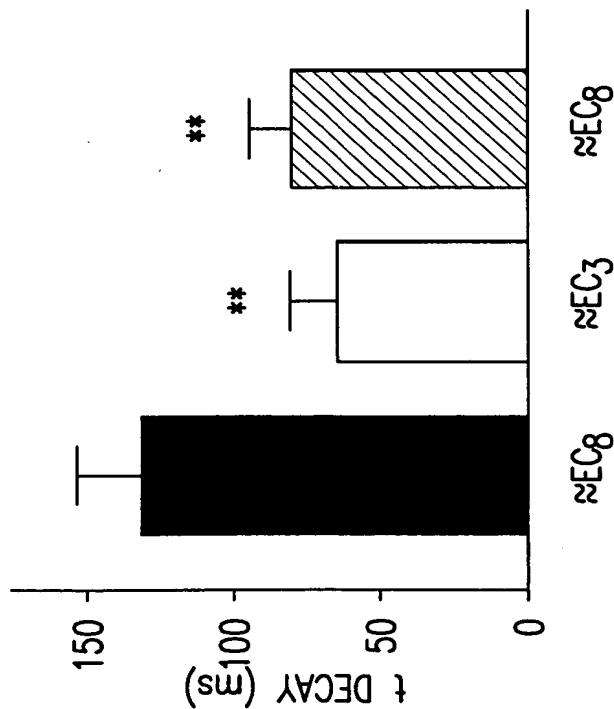


FIG. 10B



$\alpha 5$  Co-Assembles with  $\alpha 3$  and  $\beta 2$  in Cell Line A3B2A5

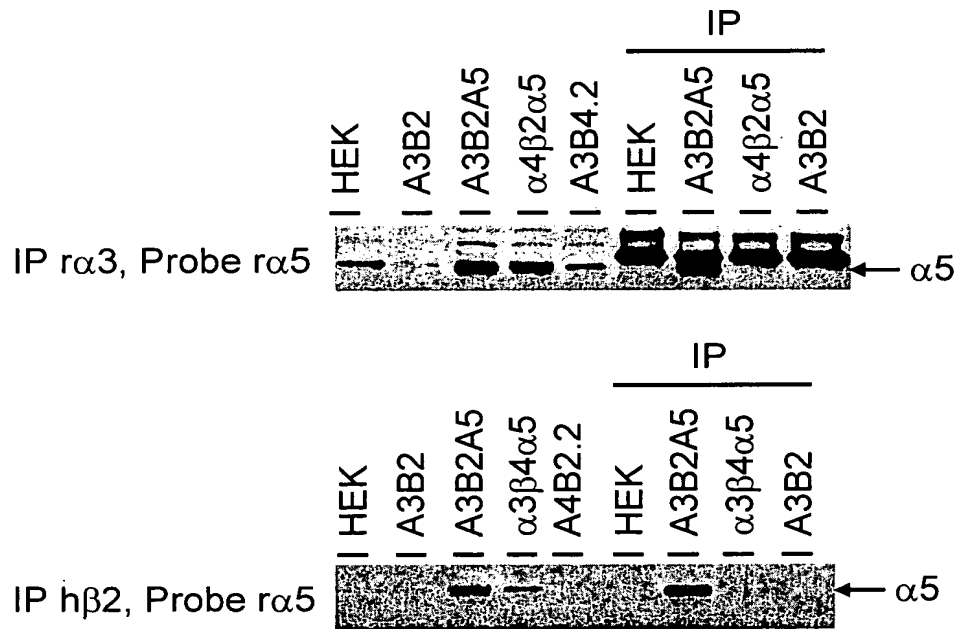


FIG.11

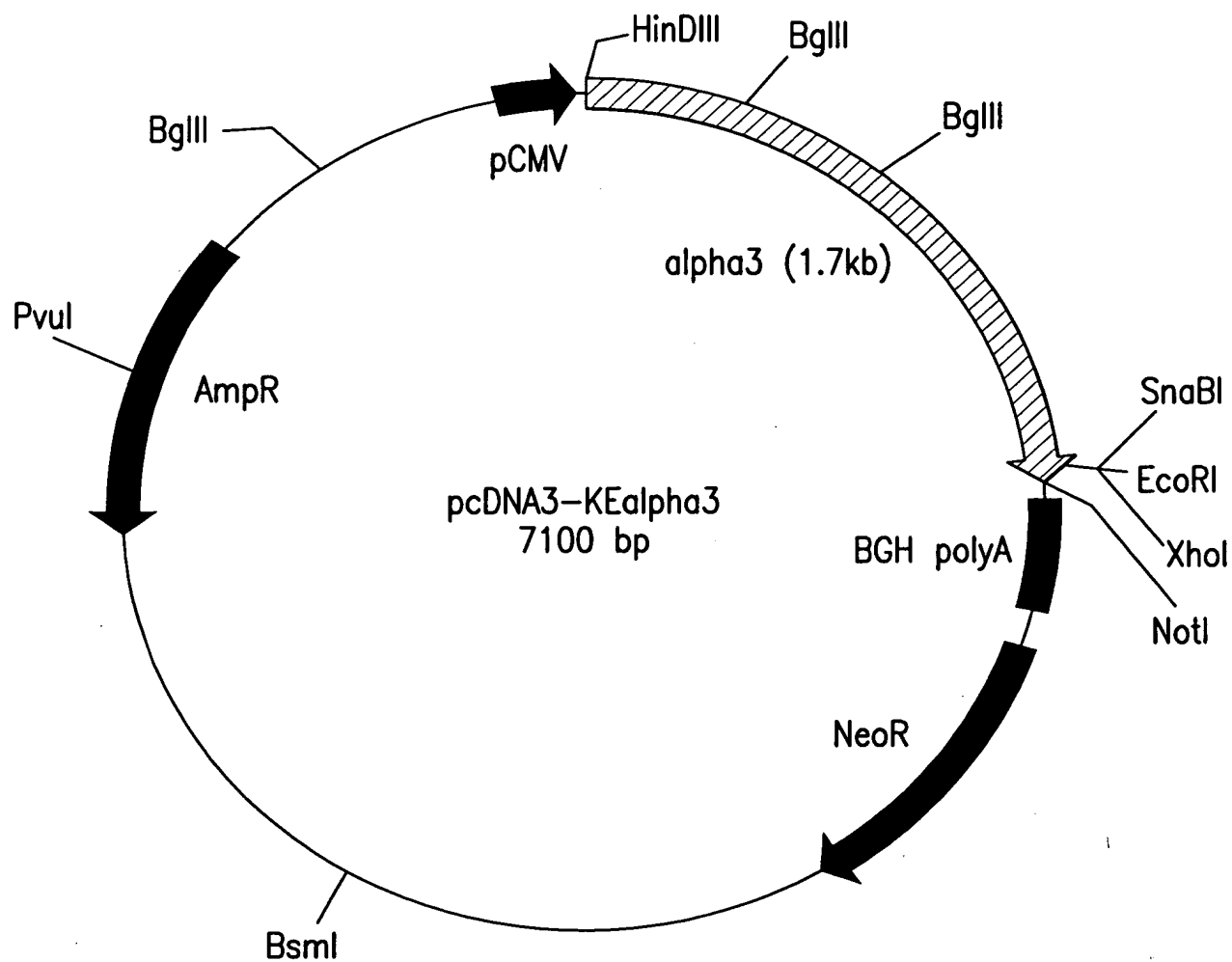


FIG. 12

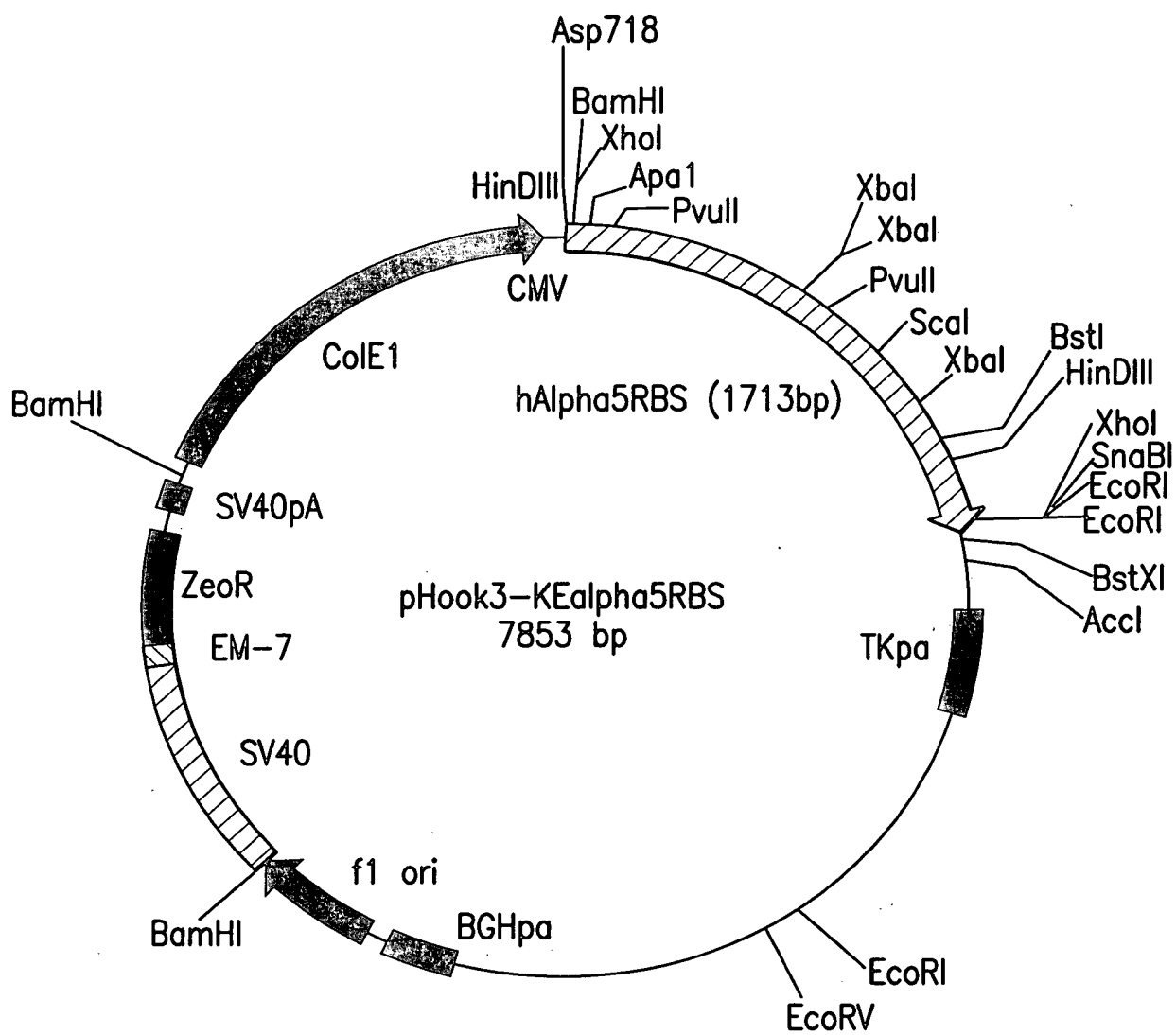


FIG. 13

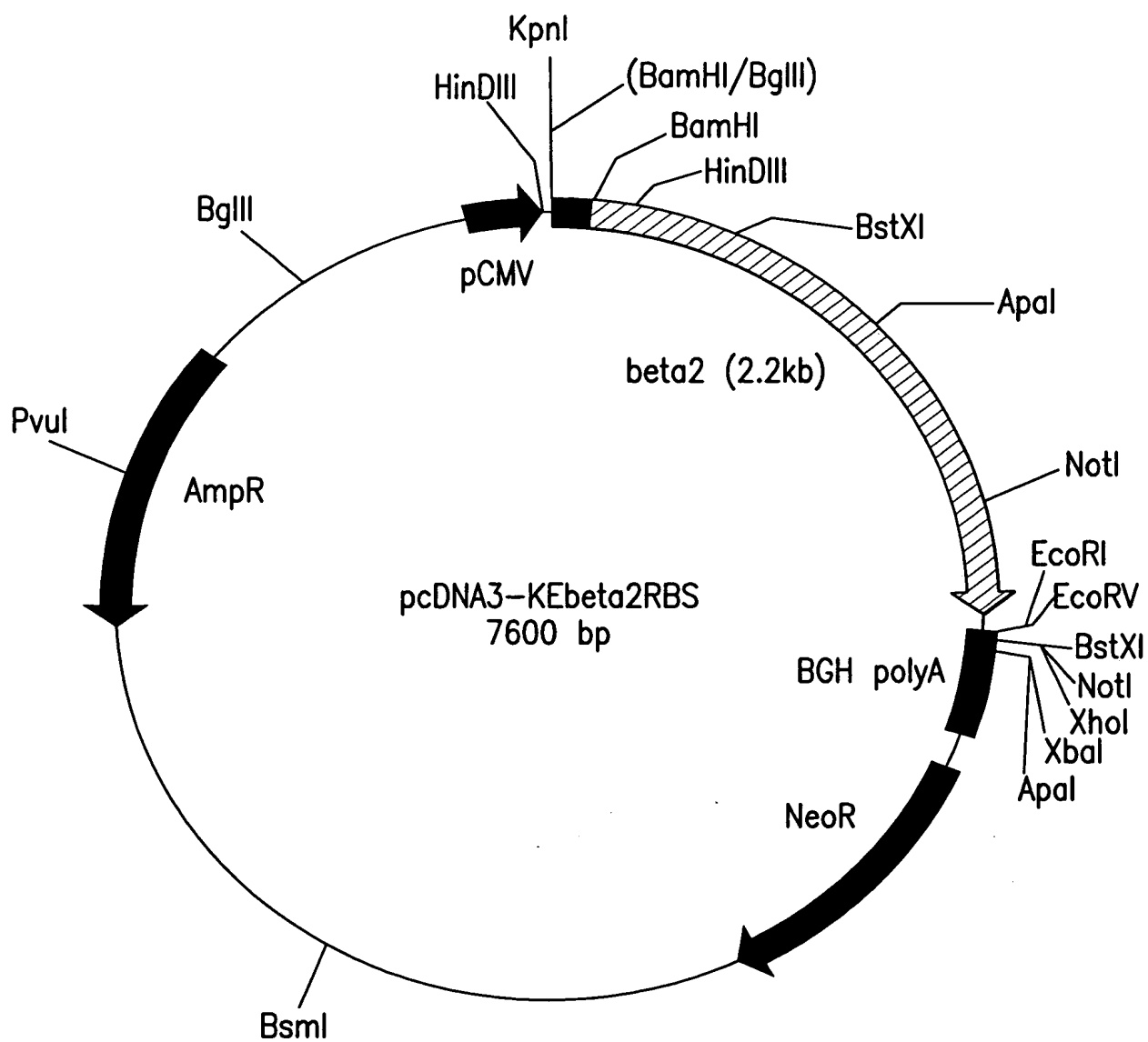


FIG. 14